upon its new conditions in large numbers, and with the purpose of making its new home a permanent one.

There is no record of the species having been found north of South Carolina before.

Toxodon and other Remains from Nicaragua, C. A.—Prof. LEIDY directed attention to some fossils, and remarked that they were part of a collection which he had been invited to examine by Mrs. Dr. B. F. Guerrero, now residing in this city. The collection was obtained from the northern part of Nicaragua, but nothing further had been learned about it. It mostly consisted of uncharacteristic fragments of bones, but among them were many interesting specimens referable to Megatherium, Elephant, Mastodon, Horse, Ox, Toxodon, and Capybara. The association of these animals is another illustration of the extension of the early South American quaternary fauna into North America. Among the remains of *Megatherium* there is the greater part of the distal extremity of a femur and a fragment of the mandible with two teeth. Of the Elephant there is a portion of a molar tooth. Of the Mastodon there is a molar tooth and portions of several others apparently of the *M. andium*. Of the Horse there are two upper molar teeth, with no well-marked difference distinguishing them from those of ordinary varieties of the Domestic Horse. Perhaps they may pertain to one or other of the species indicated by Prof. Owen with the names of *Equus curvidens* or *E. tau*. Of the Ox, the collection contains several horn-cores of different sizes; one, double the size of that of the Domestic Ox.

The Capybara is indicated by a fragment of the left ramus of a mandible with the first molar alveolus containing the greater part of the tooth. The specimen conforms to the corresponding portion of the jaw of the living Capybara, but indicates a considerably larger and more robust animal. Considering the difference in size and age of the fossil, it was probably a different species from the Capybara, and regarding it as such he proposes for it the name of *Hydrochoerus robustus*. The first molar tooth complete would have the appearance represented in figure 1, and, except in size, does not differ from that of the Capybara. Comparative measurements of the fossil are as follows:—

1.

	H. robustus.	Capybara.
Depth of mandible at first molar,	56 mm.	33 mm.
Length of first molar, . .	55 "	36 "
Fore and aft diameter, . .	25 "	17 "
Transverse diameter of last dental plate, ...	13 "	9 "
Diameter of incisive alveolus, .	20 "	10 "

Dr. Lund, in his Fossil Fauna of Brazil (An. Sc. Nat., 1839,

214) refers to remains of *Hydrochoerus*, which he refers to two species, one as *H. affine Capybaræ*, not different from the living Capybara, and another which he calls *H. sulcidens*, of a size intermediate to the latter and the Tapir, and having the incisors deeply grooved in front. He remarks the former differs in having the incisors smooth in front as in the living species, which saying is obscure, for in the living Capybara the incisors are conspicuously grooved in front.

Prof. Owen (Voyage of the Beagle 110), speaks of a decomposed molar tooth of *Hydrochoerus*, found with remains of *Megatherium*, *Toxodon*, etc., by Mr. Darwin at Bahia Blanca, S. A. He remarks that the fossil differs from the corresponding tooth of the Capybara, in the greater relative breadth of the component laminæ.

Prof. Gervais (Rech. Mam. Fos. de l'Amerique Meredionale, 1855, 12), describes remains of Hydrochoerus, found with those of Megatherium, Toxodon, etc., at Tarija, Bolivia. They consisted of portions of upper jaws, which are regarded as pertaining to a species but little different in size and in the form of the teeth from the recent Capybara. They are referred to the *H. affinis Capybaræ* of Dr. Lund. A specimen of a maxilla with the last two molar teeth, figured in Plate xiii, fig. 3, of the work, indicates a more robust animal than the living Capybara, and the last molar tooth is composed of fourteen plates, a greater number than exists in the recent animal. In four skulls of the latter he found the last upper molar to have twelve plates, while in the fossil described by Gervais there are fourteen plates. Comparative measurements of the latter fossil with the recent animal are as follows:—

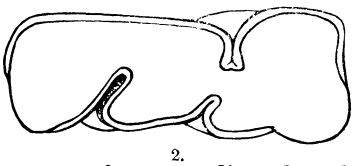
	Capybara.	Tarija fossil.
Last molar, fore and aft diameter,	33 to 34 mm.	50 mm.
Last molar, transverse diameter,	12 to 13 "	20 "
Penultimate molar, fore and aft,	9 to 10 "	14 "

He thought it probable that the remains of *Hydrochoerus*, referred by Lund and Gervais to *H. affinis Capybaræ*, and those mentioned by Owen, as above noted, probably also belong to the species he had named *H. robustus*. He formerly described some remains of *Hydrochoerus*, which were found in association with those of *Megatherium*, etc., in the Ashley Phosphate Beds of South Carolina (Post-pleiocene Fossils of South Carolina, 1860, 112, pl. xxi, figs. 3–6). These consist of teeth, which agree in size with those of the recent Capybara, and were referred to a probably extinct species, with the name of *H. Æsopi*.

The most interesting fossils of the collection are those of *Toxodon*, as being evidence of the former existence of this remarkable animal in North America. The best preserved and best marked specimens consist of a nearly complete lower molar tooth, and two portions of a lower incisor. These in their form and size best

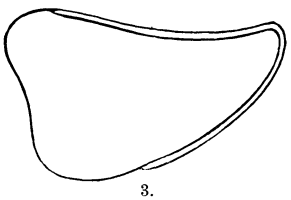
agree with the corresponding teeth of *Toxodon Burmeisteri*, described and figured by Dr. Burmeister, in the Annals of the Museum of Buenos Aires, 1869, 256, pl. xi.

The molar tooth is the penultimate of the left side. Its length, when complete, has approximated five inches, and it measures 43 mm. fore and aft, and 18 mm. transversely at its fore part. An outline of the triturating surface is represented in figure 2. Enamel invests the outer surface extending about half way round the corners in front and behind. On the inner surface enamel invests the middle extending furthest behind. The inner angles of the tooth are both destitute of enamel. The outer enamel layer forms a single inflection about the anterior third of the tooth; the inner enamel layer forms two inflections nearly equidistant behind the position of the outer one; the posterior inflection being the deepest.



2.

The incisor, apparently the second lower of the right side, is broken into two about the middle, and when complete has been over six inches long. The transverse section, as seen in figure 3, viewed from below, is triangular, with the apex directed outward, and the base inward or mesially. The front surface is transversely convex, and the back surface in the same direction concave. The inner surface, extending around the corners, further in front than behind, is destitute of enamel. The triturating surface is worn away in a slope from the outer border inward and backward. The measurement of the section in front and behind is 37 mm., and internally fore and aft 23 mm.



3.

JUNE 8.

The President, Dr. LEIDY, in the chair.

Twenty-one persons present.

A paper entitled "On the Histology of Salpa (S. runcinata-fusiformis)," by Dr. Chas. S. Dolley, was presented for publication.

On the Expansion of the Crystalline lens.—Dr. BENJAMIN SHARP remarked that it is well known that accommodation in the eye, for distance, is effected by the contraction of the ciliary muscle, drawing on the point of attachment of the capsular ligament of the lens, the lens widening its optical axis as soon as the tension